

APPLICATION NO.

09/753,363

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

| www.uspto.gov |                     |                  |  |
|---------------|---------------------|------------------|--|
|               |                     |                  |  |
|               | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |

7590

09/26/2003

FILING DATE

01/02/2001

Stephen R. Christian BECHTEL BWXT IDAHO, LLC P.O.Box 1625 Idaho Falls, ID 83415-3899

| EXAMINER               |  |
|------------------------|--|
| IAMILTON, MONPLAISIR G |  |

1685

PAPER NUMBER

ART UNIT

B-094

DATE MAILED: 09/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

FIRST NAMED INVENTOR

Zoran Obradovic

4

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Application No.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | plicant(s)                                             |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|--|--|--|
| Advisory Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 09/753,363                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | OBRADOVIC ET AL.                                       |  |  |  |
| Advisory Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Examiner                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Art Unit                                               |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Monplaisir G Hamilton                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 2172                                                   |  |  |  |
| The MAILING DATE of this communication appe                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | ears on the cover sheet with the c                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | orrespondence address                                  |  |  |  |
| THE REPLY FILED 08 September 2003 FAILS TO PLACE Therefore, further action by the applicant is required to a final rejection under 37 CFR 1.113 may only be either: (1 condition for allowance; (2) a timely filed Notice of Appea Examination (RCE) in compliance with 37 CFR 1.114.                                                                                                                                                                                                                                                                                                                                                                                                                          | oid abandonment of this application application abandonment of the control of the | ation. A proper reply to a n places the application in |  |  |  |
| PERIOD FOR RE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | PLY [check either a) or b)]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                        |  |  |  |
| a) The period for reply expiresmonths from the mailing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |  |  |  |
| b) The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |  |  |  |
| Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |  |  |  |
| 1. A Notice of Appeal was filed on Appellant's 37 CFR 1.192(a), or any extension thereof (37 CFI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |  |  |  |
| 2. The proposed amendment(s) will not be entered be                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | ecause:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                        |  |  |  |
| (a) X they raise new issues that would require furth                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | er consideration and/or search (                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | see NOTE below);                                       |  |  |  |
| (b) they raise the issue of new matter (see Note to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | pelow);                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                        |  |  |  |
| <ul><li>(c)  they are not deemed to place the application i<br/>issues for appeal; and/or</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | n better form for appeal by mate                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | rially reducing or simplifying the                     |  |  |  |
| (d)  they present additional claims without cancel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | ng a corresponding number of f                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | inally rejected claims.                                |  |  |  |
| NOTE: See Continuation Sheet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |  |  |  |
| 3. Applicant's reply has overcome the following rejection(s):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |  |  |  |
| <ol> <li>Newly proposed or amended claim(s) would<br/>canceling the non-allowable claim(s).</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | be allowable if submitted in a se                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | eparate, timely filed amendment                        |  |  |  |
| 5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for application in condition for allowance because:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | dered but does NOT place the                           |  |  |  |
| 6. The affidavit or exhibit will NOT be considered bed raised by the Examiner in the final rejection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | ause it is not directed SOLELY t                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | to issues which were newly                             |  |  |  |
| 7. For purposes of Appeal, the proposed amendment explanation of how the new or amended claims we                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | · · · —                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | / <del></del>                                          |  |  |  |
| The status of the claim(s) is (or will be) as follows:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |  |  |  |
| Claim(s) allowed:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |  |  |  |
| Claim(s) objected to:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |  |  |  |
| Claim(s) rejected: <u>1-25</u> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                        |  |  |  |
| Claim(s) withdrawn from consideration:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                        |  |  |  |
| 8. The proposed drawing correction filed on is                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | a) approved or b) disapp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | roved by the Examiner.                                 |  |  |  |

10. Other: \_\_\_\_

9. Note the attached Information Disclosure Statement(s)( PTO-1449) Paper No(s). \_\_\_\_\_.





Continuation of 2. NOTE: Claims 1-15 raise new issues and Claims 16-25 remain unpatenable.

Applicants have amended Claims 1 and 7 to further clarify the act of partitioning, the data set into a training set and a modeling set. This raises a new issue that requires further consideration.

Applicants have argued that the cited prior art does not disclose an act of inspecting the data set to perform statistical analysis. Applicants state that although Busche discloses being able to perform statistical analysis, this in not equivalent to the claimed act of inspecting. Examiner disagrees with applicant; Busche discloses that data mining techniques are used to delineate relationships between attributes within the data (col 2, lines 25-30). Furthermore, Busche discloses that the data mining techniques are performed on the attributes that are selected from the data set. Therefore, Examiner holds that Busche discloses the claimed act of inspection.

Finally, Applicants further argue that Hauwiller does not disclose providing recommendations as to how to achieve a predetermined target variable, and creating new spatial data mining methods. Hauwiller col 4, lines 35-45 discloses creating an application map that is used to achieve a desired output, crop yield (col 4, lines 55-60. Furthermore, Hauwiller discloses the use of recommendation equations, which can be derived from the user or empirical data (col 7, lines 25-30), are used to derive the application maps. (col 8, lines 35-40). Therefore, application maps are equivalent to the claimed recommendations. Furthermore regarding applicants' argument that Hauwiller does not disclose creating new spatial data mining methods, Examiner holds that Hauwiller discloses this limitation. Hauwiller discloses the use of an Expert system, which essentially uses different data mining techniques to determine relationships between data (col 6, lines 15-25). Finally the expert system is able to learn from its experience thereby essentially developing a new data mining techniques when it is executed on a subsequent occasion. Applicants' specification page 35 essentially states that all spatial data mining techniques can be implemented by the claimed invention and that new techniques may be added. Examiner holds that Hauwiller can add new techniques also because he discloses an expert system that can be updated based on its experience (col 3, lines 50-55). Therefore the claimed invention is unpatentable.

KIM VU

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100